ABSTRACT

A method and circuit periodically pseudo-randomly select a sample of digital event pulses comprising a logic data signal. A first timer times a first time interval. A second timer times a second time interval within the first time interval. A delay timer, coupled between the first and second timers, pseudo-randomly delays initiation of the second timer from the start of the first time interval. In one embodiment, the first timer is an (N+1)-bit binary counter. The delay timer includes an N-bit round robin latch and seeded by a pseudo-random number generator having fewer than N bits, the round robin latch shifting its contents to form an N-bit pseudo-random number. The second timer is initiated when the value of the first timer is equivalent to the round robin latch. A coincidence circuit passes digital event pulses during the second time interval. A count is accumulated of the sampled digital event pulses.